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THE GENESEE FARMER.

SATURDAY, APRIL 21, 1838.

Sheep and Wool Growing.

The sheep appears to have been one of the first animals that yielded to the domination of man, and submitted to domestication. In the farthest zoological catalouge on record it occupies a conspicuous place. In the twelfth of Genesis it is said that Abraham had "sheep, and oxen, and he-asses, and men servants, and maid servants, and she-asses, and camels." Some other animals were more obstinate, too proud or too self-willed to submit to his rule, or claim his protection. Of these we may mention the horse and the hog, neither of whom occupy a place in history for a long time afterwards. The early domestication of animals seems to have been for furnishing a supply of food, and in the patriarchal ages and countries, milk was, as it is now, the principal means of subsistence. Flesh does not seem to have been in general use as an article of food, and though on extraordinary occasions a lamb or a kid was slain, yet it is evident, flocks and herds were more valued for their milk than their meat. Clothing was plainly a secondary object with the ancients; it is clear that, like Moore's Susannah, they went—"In very thin clothing and but little of it." They approached the verge of nudity as near as decency would permit; and the wool, and fine linen, and ramskins died red, were all considered more as articles of luxury than of necessity.

But whatever may once have been the value and uses of the sheep, it would now be difficult if not impossible to find a subtitute; and as supplying us with clothing, and furnishing a large portion of animal food, it fully deserves the care and attention it receives. In our climate there seems no alternative between the growing of wool and a clothing of skins; and in some countries, particularly England, the choice for the great mass of people lies between total abstinence from flesh and a leg of mutton. The use of mutton as food in this country is rapidly increasing; and the rearing of, sheep that shall combine the greatest quantity of flesh, with the best quantity of wool, is receiving here as in Europe more attention than formerly. That they can ever be rendered perfectly compatible, is improbable; nature seems to have ordered it otherwise, and all the efforts of breeders seem on this point to have been unaviling. The more constitutionally delicate the animal, and the less able to endure hardships it is, the finer and more silky appears to be the fabric of the wool; and while the interest of the farmer demands hardiness of constitution, and weight of carcase, the interest of the manufacturer is the reverse. Give him the finer qualities of wool, and carcase and constitution are with him secondary considerations; and however much it may be regretted, it is clear that the interests of the wool grower and those of the manufacturer, are on these points not perfectly identical.

All things considered; the prices and demand for wool; the ease and chances of rearing; the weight of carcase and value for mutton; it would seem that medium qualities of wool, such as experience shows can be grown on heavy strong constitutioned animals, merinoes or otherwise, will be the most profitable for ordinary farmers, leaving the finer kinds to those that are able to devote their time and attention more fully to their flocks. Without more care and more expence in the management of their flocks than farmers are usually able to afford, the finest qualities of wool cannot be produced; and for almost every purpose, good strong fibred wool is preferable to weak inferior wool, nominally of a higher grade.

The quality, strength and softness of wool is much influenced by the condition and health of the animal, and by the treatment it receives while growing. The chief care of the farmer should be directed to the health and good condition of his flock, as, if he is safe on these points, he has not much to fear on any other. To improve the wool, as well as to guard against disease, the best wool growers of Europe have adopted the practice of *salving the sheep* as it is called. It is well known that some sheep, and some breeds of sheep, yield a great deal of oily matter, which keeps the wool soft; and that the substance called yolk, is on these animals more abundant than on the dry skinned and coarser wooled kinds. Smearing, or salving, is designed to supply this deficiency of oily matter, as well as to prevent all cutaneous diseases, such as the scab, &c.

The preparation used for this purpose is a mixture of tar and oil; but when the quantity of taris too large, it is found to be rather hurtful than beneficial, rendering the process of scouring difficult, and after all leaving a stain on the wool. This is occasioned by its leaving the grease with which it was mixed, and in such cases it accumulates on the sides of the animal, matting the wool and serving as a receptacle for impurities. In too large quantities it has been found to be of an irritating nature, rather promoting than preventing diseases of the skin; but when only a small portion of tar is incorporated with the oil, its effects are good both on the skin and on the wool. In the 'Mountain Shepherd's Manual,' a small but valuable work on sheep published by the Society of Useful Knowledge, it is said—

"Of late several compositions have been proposed and extensively tried, in which the spirit of tar has been substituted for tar itself. This has been complained of in some cases as too irritating, and there is not a doubt that a too free use of spirit of tar is injurious, and even fatal. Some of the salves, while they prove perfectly well adapted to flocks that are clean, have been found ineffectual either in curing or warding off the scab—a disease which the common salve, made of tar and grease, seems effectually to resist. When a flock is perfectly clean, olive oil has been found to be the best substitute for softening the fleece, and warding off rain or snow. If a tar salve for smearing were made so as to be free from the impurities of the tar, it might probably answer every purpose. The ordinary proportion of one cwt. of grease to a barrel of tar might be increased to one and a half cwt. and when melted together, the impurities of the tar might be suffered to subside, and be separated. In this way the tar might not leave a stain upon the wool when scoured. Olive oil seems to impregnate the wool or to adhere to it more firmly than any other greasy matter, and it has been extensively and successfully used by some of the best sheep growers in the kingdom."

In this country, smearing, to benefit the wool, has not been generally adopted, though we think, where the scab is apprehended, it might be advantageously used.

There are many diseases of sheep complained of in Europe, and which frequently cause great loss to their proprietors, with which wool growers in this country, are as yet, fortunately unacquainted. The complaint called the scab, is, however, extensively disemminated in this country, and is yearly causing more or less damage and loss. The disease is infectious, and it rarely appears in a flock without a considerable number being infected. It seldom originates or spreads among sheep that have been smeared with the tar ointment, but it is sometimes communicated to them from infected animals. Sheep that have had poor food, and are consequently in a low condition suffer the most from this disease. The true preventive is cleanliness and good keeping. When a sheep is affected by the scab, the wool appears fretted or started from the skin, is discolored by a matter that appears to exude from the cracked skin, and the animal is disposed to rub itself against posts and fences. In ordinary cases common smearing salve or ointment, with the addition of a little sulphur will be found effectual. When the disease is not very far advanced an infusion of tobacco in the proportion of a pound to four gallons of water and as many of urine will effect a cure. The work quoted above recommends in severe cases an ointment of th following composition and proportions:—

Corrosive sublimate	8 oz.
White hellebore, in powder,	12 oz.
Whale or other oil	6 gallons.
Rosin	2 lbs.
Tallow	2 lbs.

"The sublimate to be reduced to a fine pawder, and mixed with a portion of the oil and also the hellebore. The rosin, tallow, and the remainder of the oil are to be melted together, and the other ingredients then added and well mixed. Should the ointment appear too thin, the proportion of oil may be diminished, and the tallow increased."

Before applying any remedies, the diseased parts should be well washed in soap and water, applied with a soft brush; and if the wool is started, or in the way, it should be at once cut off.

Few animals suffer more from the attacks of various kinds of flies than the sheep, and none are less capable of avoiding their annoyance. There is the *Estrus ovis* which deposits its eggs in the nostril of the sheep, from which it ascends to the cavities of the head, producing constant irritation, and not unfrequently death. This fly is the most common in the latter part of July or August, and its presence near a flock may be known by the animals instinctively placing their noses as near the ground as possible to keep off the enemy, listening to catch the sound of his wings, and darting away with their noses rubbing the earth to a distant part of the field to avoid the pursuit. Rubbing the end of the nose with tar, or spreading salt on tar to be licked off, furnishes the best preventive against this fly that has yet been discovered

Another fly deposits its eggs around the roots of the horns, and about the tail of sheep; where if unmolested, they form deep ulcers, and the poor animal runs the risk of being devoured alive. Dr. Parry recommends the following ointment to be well rubbed in around the horns and the tail, as it will compel the flies to change their place of attack or leave the animal.

Strong mercurial ointment	1 part
Rosin	1 part
Hog's lard	2 parts

Melt the hog's lard in a convenient vessel and add the rosin. When these ingredients are well incorporated add the ointment (the common *unguntum* of the shops) and stir the whole till it becomes cold, to prevent the mercury from sinking. The proportion of mercury is too small to have any effect on the animal, but the least particle of it is fatal to any insect. Rubbing the head and tail with a composition of tar and train oil has been found to keep off the fly well, but it is not as fatal to eggs already deposited, as the above ointment.

One word as to washing sheep. In England the common practice is to, make them swim some two or three times across a river or pond; but where regard is had to to the marketable qualities of wool, it is evidenty this process must be very insufficient. Here we see them sometimes driven for miles through dusty roads and over hill and valley to the washing; and if well washed, as may by some possibility happen, by the time they arrive at their pastures again, the color of the wool can scarcely be discerned for dirt and dust. Almost every farm furnishes the means of washing far better than either of these; a little brook, and a large tub or vat, is all that is required, and the whole may be placed in order in a few hours. In such a tub or vat the sheep may be washed cleaner, and without the danger and fatigue of carrying a wet fleece some two or three miles. A little soap, where there are large quantities of oil or yolk in the wool, will

greatly assist in cleansing the fleece. After washing, the sheep should have a clean pasture, and the operation of shearing should not be performed till the wool is thoroughly dried, and if time elapses sufficient to allow the fleeces to be again saturated with the animal oil, so much the better for the wool.

There are few of the processes in the management of sheep more slovenly performed than the one of shearing. The sheep is frequently most terribly mangled, and the surface of the animal from the tufts and ridges of wool is as uneven as a new ploughed field. A gentleman in Columbia county a few years ago, obtained leave of some of his neighbors, who thought their sheep were *pretty well sheared*, to have his shepherd reshear them, as an experiment, and from two to four ounces were taken off at the second clip Dr. Parry says:

"The closer wool is clipped the better; and the way to effect this, and to save time is to take but a small quantity into the shears. Neatness in shearing can only be acquired by practice. The only rules which can be written are, use shears of moderate size, and take up very little wool between them."

After being sheared, if proper regard is had to the comfort and health of the animal, and the quality of the next year's clip of wool, the following unguent must be well rubbed on every part of the animal, with a currying brush; and a little of the mercurial ointment may be rubbed around the horns and tail.

Train oil, or seal oil,.....4 gallons
Tar .....½ gallon
Oil of turpentine.....1 pint

This composition well rubbed on will materially aid in destroying keds and ticks, should there be any on the sheep, will give softness to the wool, and greatly relieve the animals from the irritating and tormenting attacks of the flies.

Some diversity of opinion appears to prevail on the subject of shearing lambs, among owners of sheep, but our experience is decidedly in favor of the practice for two reasons. The first is, the profits from the sale of the lamb's wool, which will average from thirty to forty cents per head; and the second reason is, it keeps the flock almost entirely free from the great enemy of sheep, the tick; as after shearing the sheep, if there are any ticks on them, they will take refuge on and torment the lambs; and the later shearing of these is almost certain to eradicate the whole. Experiments have shown that little if any loss of weight is sustained by the succeeding fleece, and the wool is clearly of a better quality, being free from those hairs that abound in the fleeces of most lambs.

"Dr. Parry recommends the shearing of fine wooled lambs about the beginning of August, having found the hog (or yearling) fleeces grow finer, when the lamb fleeces are removed. There does not appear to be any danger to be apprehended from the operation at that season of the year; and the wool will have time to grow to a sufficient length for defending the animal from rain, cold, and snow before winter sets in. His recommendation goes no farther than to fine wooled lambs; but those of other breeds may not probably be hurt, if these do not suffer any injury from the operation."

If any of the flock at any time exhibit symptoms of disease, they should at once be looked to, and the evils if possible ascertained and corrected. The celebrated Saxony flocks of Prussia are frequently individually examined, with regard to their health, the quality of their wool, and their constitutional delicacy or hardiness, and their value and estimation graduated accordingly.

If sheep are smeared or salved, the lambs are rarely troubled with vermin of any kind; but where they become infected with ticks, and the owner is averse to shearing, "a solution of white arsenic in water in the proportion of an ounce to a gallon, or three pounds of arsenic to about fifty gallons of water, and plunging the lambs into it, taking care that they do not dip their heads or taste the water, will destroy them all." Arsenic, however, is so dangerous a poison, and wherever used is so liable to produce mischief, that we would recommend an infusion of tobacco, as equally effectual, in this country as economical, and in every respect safe and preferable. Few animals better repay care and attention than sheep, and no one should think of making the business of wool growing a profitable one, who is unwilling or unable to spare them the time necessary for this purpose.

The most critical period in the year for the sheep is shown to be the time of shearing. Divested of the dense covering it has so long worn, it is extremely sensitive to all changes of temperature, and feels the effects of heat or cold in a tenfold degree. If turned out where there is no place of shelter, the skin will be burnt and excoriated by a hot sun, and a disease of the surface not unlike the scab in appearance, be induced. If on the contrary, as is not unfrequently the case in our variable climate, a cold rain with the thermometer at the freezing point, succeeds, the days chosen for shearing, the sheep if left unprotected will suffer greatly from colds, should they escape being actually chilled to death, a result not very uncommon, with the finer wooled and thin skinned kinds. A gentleman farmer of our acquaintance assured us that last year a sudden change of temperature took place the day he finished shearing his flock; and though he had them immediately collected and placed in shelter, some ten or a dozen were unable to stand, and were brought by his men to the sheds, and for some time it was doubtful whether the effects of so great and sudden a chill would not be fatal to the most of them. His flock is of the best grades of saxon and merino; and though by great care all were finally saved, it furnishes a strong proof of the fact already alluded to, that the finer the wool, the more delicate and tender the animal.

Mr. Colman's Report.

By the kindness of the distinguished author, we have received an early copy of this first agricultural report made in pursuance of his appointment as Commissioner of an agricultural survey of Massachusetts; and though it embraces but a single county, (Essex) and, as a first report, must have been made under disadvantages which will not exist hereafter, we find it to contain a mass of information of the most valuable kind, and bear the most abundant evidence of the author's talent for embodying the information acquired by experience or by observation. We think it a model of what such works ought to be; and should be most happy to announce that a similar series of reports on the agriculture of our own great and powerful state was in progress, developing the resources, and pointing out the defects of our present systems of farming.

We know of no individual in the country who has amassed a more abundant store of agricultural *facts*, or who is more happy in applying them, than Mr. Colman. He has traveled much, and his habits of close observation on subjects connected with his favorite pursuit, have rendered him eminently qualified for the task to which he has been selected.

The report embraces first, a geographical and topographical view of the county, a brief description of its soils and then proceeds to the crops, and the methods of cultivation. "The crops produced in Essex are Hay, English, Salt, and fresh Meadow; Corn; Wheat; Barley; Rye; Oats; Buckwheat; Potatoes; Onions; Ruta Baga; Carrots; Turneps; and garden vegetables. The Beet has been cultivated extensively for feeding cows; and on a small scale for an experiment in sugar. Attempts were made to cultivate sunflower seed for oil; and the mulberry has been attempted in some places for silk."

Hay is the most important crop grown in Essex and is a source of great income. "The last seven years the price has fluctuated from twelve to 28 dollars per ton. It would not be far from a true average in different parts of the county, to place it for that time at sixteen dollars." Lying on the sea coasts, large quantities of salt marsh hay are procured, and for all kinds, a ready market is found in the cities and manufacturing towns of the vicinity.

Mr. Colman remarks, "of the proper time of cutting herds grass, which is the principal grass cultivated in the county, the general impression is that it should be cut early rather than late; and that the most desirable time is as soon as the seeds begin to shake off. A very shrewd farmer remarks, however, as the result of his observation, that grass spends much better when perfectly ripened, than when cut early; besides it is cured at much less expence. According to the tables of the nutritive matter found in different grasses, made by order of the Duke of Bedford, it seems that an acre of this grass cut at the time of flowering yielded 1595 lbs. of nutritive matter; and when cut while in seed it yielded 3668 lbs. of nutritive matter, making a difference in favor of cutting when ripe, of 2073 lbs." The product in the several towns is from one to three tons per acre, and Mr Colman estimates the average of the county at 1 3.4 tons to the acre.

Indian corn is the next most valuable crop cultivated in Essex, and a large part of the county seems well adapted to its production. Last year corn planted on the 10th of June was found ripe on the 7th of September; and some fields visited by Mr. Colman in the course of his survey yielded from 50 to 60 bushels an acre. The highest recorded product in the county is 110 bushels to the acre, and the average is estimated at 54 bushels. The general cultivation is described by a farmer as follows:— 'Half the corn raised in our neighborhood, is raised in a course of crops; first year, break up grass land and plant with corn; second year, corn or potatoes; third year wheat, barley, or oats, with grass seed; then from three to four years in grass. We use from four to ten cords of manure, average eight cords per acre; but only half should be charged to the corn or potato crop."

There has been no general failure of the corn crop in Essex, until the last two years, since 1806, when a frost occurred every month in the year. In the last two years fields ripened perfectly where an early variety was planted. "The Pickwacket corn, an early eight rowed variety, highly productive, and yielding under good cultivation 70 or 80 bushels to an acre, has been sound and good in many places within the county; and even in the interior of New Hampshire from which it was brought. The Dutton or Sioux corn has likewise ripened in favorable locations. This is a valuable variety, abating the size of the cob. We have ascertained by repeated trials, made with as much exactness as the case permitted, that in thickly set ears, the amount of grain upon a large cob, bore an equal proportion to the size of the cob with that found in smaller varieties The objection to the large cob, is the quantity of moisture contained in it, in consequence of which it is liable to become heated and mouldy in the bin; though the exterior may be bright and sound."

Corn retains its soundness and vitality, exposed to the air and without preparation, longer than most other seeds; and Mr Coleman found some kernels from an ear which had been in his possession since 1806, to vegetate well the last year. Mr. Colman does not estimate the worth of corn too highly. It is one of the most valuable plants that can be grown in any country, and so long as corn will grow a land has nothing to fear so far as food is concerned. The remark quoted from a Virginia farmer, that this crop, is 'Meal, Meadow, and Manure,' can hardly be considered an exaggeration.—We shall return to this report at another time.

State Agricultural Society.

Among the many excellent papers and reports read at the late meeting of the State Society at Albany, there was none that exhibited more research, embraced more useful information, or was calculated to interest more generally, than the report on sheep from the pen of H. S Randall, Esq. Cortland County. It has been given in a late number of this paper, and has been extensively read and approved.

We have no where seen the petty and disgraceful system of swindling which has been carried on by palming inferior animals of impure blood upon farmers at extravagant prices, more fully exposed than in this report. The individuals concerned, and the means resorted to, in carrying these speculations into effect, are, in part at least, named and revealed, and the public put on their guard against similar impositions.

It has been said by some caustic observer of men, that

as a whole mankind love to be cheated; and when the mania of speculation come over them, be it of pigs, merinoes, short horns, banks, or western lands, they *are* cheated to their heart's content. Jonathan is not noted for his gullibility; in this respect he is said to be somewhat the reverse of his elder brother John. He usually is too cautious and inquisitive to be easily imposed upon, but Mr. Randall's report proves that on the subject of Saxons and Merinoes even Jonathan has been bitten sadly.

This Report, while it throws much light on the subject of sheep generally, will be useful in other respects. It will teach farmers to be cautious as to their purchases of sheep for breeding, or for wool; and as the rage for improved cattle is now as great as was once the thirst for merinoes, it will serve to prove that manufactories of Short Horns for sale, can be established with as much facility as were those of the high priced Saxons. Saxon and Merino sheep, of pure blood, are to be found, and can be obtained; and improved cattle have been imported and bred among us, respecting which there can be no mistake, and whose pedigrees cannot be questioned. To such sources our farmers may look, certain of superior breeds, without fear of fraud or imposition.

Mr. Ruggles' Report.

One of the most able and satisfactory documents which we have had the pleasure of perusing in a long time, is the report, the title of which is placed at the head of this article; and which was made to our legislature by the committee of ways and means on the United States deposit fund, of which Mr. Ruggles is chairman. The report is able, because it embraces the whole ground of our state finances, and its main positions are established by facts and arguments that cannot, we think, be shaken; and it is satisfactory, as proving that New-York is abundantly able to prosecute the great works she has undertaken, to a speedy completion, as well as afford liberal donations to such enterprises as may deserve the public favor.

The two subjects most interesting to the people of the state at the present moment, among our state works of internal improvement, are the construction of the Genesee River canal, connecting the Erie canal with the Allegany river, and the enlargement of the Erie canal, so as to accommodate the immense and rapidly increasing transportation of goods and produce forwarded upon it. This latter object, we think, should be pressed forward with all the energy and activity possible; and the report of Mr. Ruggles proves what no reflecting man could have doubted, that the work, considered in a financial point of view, would be perfectly safe and highly profitable for the state.

The great carrying trade of the west, must *naturally* be divided between New-York and New-Orleans; but if by supineness or negligence, New-York suffers it to be diverted by the superior expedition, or perseverance, of less favored sections, we may find years pass away before such a false step can be retrieved. Every consideration of policy, therefore, demands that the enlargement of the Erie canal should be hastened as fast as possible; and Mr. Ruggles' report demonstrates that in this case, policy and profit are synonymous terms.

It is to the funds which our canals are pouring into the treasury of our state,—funds which are destined to a rapid increase, if the state is faithful to herself,—that we can with safety look for the means of adding to the moneys set apart for the great cause of education and literature, as the increasing population may demand—of establishing and aiding agricultural schools and societies, and placing this great and fundamental interest on its proper basis—of enlarging and extending our system of internal improvements whenever the true policy of the state shall demand or require—and at the same time pay off any debt which may be contracted in carrying these works into speedy and complete operation.

We invite the attention of every reader of the Farmer to the report in question, as the reading of it will most certainly give him more clear and accurate views of the financial matters of the state than are usually taken, and will therefore abundantly repay perusal.

Arsenic a Preventive of Smut.

Although the application of lime to wheat has usually in this country been found effectual in preventing wheat from smutting, yet as the substitution of arsenic for lime is becoming common in England, and precedes the application of lime, where the latter is used, we have copied from the Farmer's Magazine, a letter from an English agriculturist, who has adopted its use, and finds it cure the most smutty and infected seed of this disagreeable property. After describing the smutty state of his crops, notwithstanding his efforts to prevent it by washing the seed in soap suds, &c., the writer says:

"I now began to enquire among my scientific friends, the best cure and preventive for smut. A medical gentleman, who occupied a small farm for his amusement, reccommended to me one pound of arsenic dissolved in three or four gallons of water, and sprinkled over four bushels of wheat with a small watering pan or wisp of hay. Another recommended one pound of arsenic to be strewed over four bushels of wheat, then wetted with water and well mixed. These they said were certain and efficacious remedies, and so I dare say they may be, but I question whether they would cure smutty seed, which I would by no means recommend, though I was determined to use my own seed smutty as it was. I found by experience that thirty-two gallons of water in a moderate sized brew tub, would swim four bushels of wheat. My SPECIFIC is, dissolve two pounds of arsenic in four gallons of water, first putting into the water a large shovel full of wood ashes, (perhaps soda or potash would be better,) or the arsenic will not dissolve. When the water boils, put in the arsenic, and stir it with a stick, and when the arsenic is dissolved, put it to twenty-six or twenty-eight gallons of water and add four stone of salt; in this brine an egg will swim like a cork. I then took my m sh tub, and having secured the bunghole with a little wisp of hay, by placing a brick upon it, I put my brine into it. I then gently *sifted* in four bushels of wheat, stirred and skimmed every bushel, as it was put in; I found I had plenty of brine to swim the whole. I preferred my granary to brine my wheat in for several reasons, but the principal one was, I could lock the door and keep every one out beside myself, and this I considered important. I next took a bucket and mop and washed my granary floor as clean as I could, and let my wheat lie in pickle all night. In the evening I dissolved two pounds more of arsenic to keep up a supply of brine, as every coombe of wheat necessarily wastes a part. Early in the morning, I drew off my brine, returned it back into its tub, took out my wheat, immediately limed it, and sowed it the next day. From that time, this was invariably my practice, and I never grew smut after. I may just remark, I do not prefer smutty seed, neither is there any occasion for steeping it twelve hours; bright clean seed need only swim, and skim it, and take it out as soon as you can."

Query:—Would not the steeping twelve hours in strong brine, and then being dried in lime, have been effectual without the use of the arsenic? Our experience would be clearly in favor of the affirmative, and so long as brine and lime are efficient preventives, we shall not resort to so active and dangerous an agent. Comparative experiments, however, are desirable, and we hope they will be undertaken and the results reported.—EDS. GEN. FAR.

INDIAN WHEAT.

This is the name given to a species of Buckwheat or *Polygonum*, which has of late attracted considerable notice in this country, as a valuable substitute for the common buckwheat of our farmers. The plant is known to naturalists as the *Polygonum Tartaricum*, and is widely cultivated in some parts of Europe, particularly those districts that are elevated and cold, and where the common variety would be likely to suffer from cold summers, or early frosts. Loudon says the principal objection to it is, that its flowers expand irregularly and unequally, and that the flour is rather blackish and bitter. It has for some years been grown in some parts of Pennsylvania, into which state it was introduced from Germany; and from thence has spread over a considerable part of the northern states. The superior productiveness it is said to possess over the common variety, and its being more hardy, constitute its claims to the notice of the farmer. In a late number of the New England Farmer, is an article on this grain, in which a correspondent of that paper says: "It produced 30 or 40 bushels to the acre on ordinary land, such as will not bear a good crop of any other grain; and sometimes yields 75 to 100 bushels per acre." Another writes, "I broke up 2 1 8 acres of pasture land, sowed one bushel and two quarts of seed, and obtained one hundred bushels, which is the greatest yield I have heard of. I sowed it on the 10th of June."

The editor of that paper, Mr. Colman, remarks,—

"We have been informed on authority on which we rely, that it has this year yielded 75 bushels to the acre; but the circumstances under which this yield was obtained, have not come to our knowledge; and it would be wrong to calculate on any such amount as usual or probable. That which we have tested, weighed 49 lbs. to the bushel. A farmer with whom we are acquainted, who has used it in his family, has obtained 35 lbs. of flour to a bushel of grain. A grain weighing thus much, and yielding in a poor soil and without manure even 25 or 30 bushels an acre, must be pronounced a valuable acquisition. It is advised by some farmers to use it for horses; but one writer says he has known it to produce a stupifying effect. * * One person says he has seen hogs, after having eaten heartily of it, become so inebriated as to be unable to walk without reeling. How far the use of it for swine would, under such circumstances, compromit those good men who have signed the temperance pledge, is a nice question in casuistry, which we shall leave them to decide. Perhaps they will construe their obligations in this matter, as applying to the furnishing the means of intoxication only to human swine."

The stupifying or narcotic effect of the Polygonum is not confined to the new variety, or P. Tartaricum. A gentleman assured us a few days since, that last summer he saw a drove of hogs that had broken into a field of buckwheat, and when discovered and driven out, many of them were so drunk, as he expressed it, as scarcely to be able to walk, reeling and staggering at a great rate. They, however, recovered as soon as the narcotic effect had passed away, and no injury was experienced by any of them. If any of our readers are experimentally acquinted with this new grain, its mode of culture, its value as a field crop and for food, and will communicate such knowledge for the Farmer, they would oblige us and perhaps many of our readers.

MELONS.

The countries in the world most celebrated for melons, are the plains of Bokkara, composed principally of sand; the Island of Cyprus, similarly constituted; and the Delta of Egypt, composed of the fine sands and sediment brought down and deposited in a course of centuries by the river Nile. Dr. E. D. Clark, in his travels in Egypt and Syria, gives an interesting account of the melon cultivation on the Nile. The bed of this long river contains abundance of sand-banks, subject to changes and shifting, from the annual floods by which they are formed. As the water recedes after the floods, these banks are gradually left dry; and are immediately occupied by the Fellahs, as melon beds. Pigeons' or doves' dung, which birds abound in Egypt, is mixed in proper quantities with this sand, and the products are astonishing. Dr. Clark affirms that when ripe, an extensive bed of these melons perfumes the air to a great distance; and as the vessel in which he sailed from Rosetta to Acre, was freighted with this fruit, the fragrance was almost overpowering.

A gentleman, a few days since, assured us that the finest melons he ever raised or tasted, were grown on a bank of pure sand thrown from a well at the depth of about twenty feet. Manure was mixed with the sand, and the seeds then planted. Three of the melons weighed above 60 lbs., or more than 20 lbs. each. There is no plant that seems more to delight in a sandy soil than the melon. To arrive at perfection it requires great heat, and this a sandy soil gives to a greater degree than any other. Few good melons are raised in the western part of this state; might not the quantity and the quality be increased by planting in manured sand, as in the above described instances? We think it well worth a trial.

A Large Crop of Mangel Wurtzel.

During the last summer, while on a visit to Mr. George Beltzoover's farm, we were very forcibly struck with the fine appearance of a crop of mangel wurtzel, so much so, that we were induced a few days since to inquire of him their product, and were highly gratified to learn that they had yielded 39 tons to the acre, which at 60 lbs. to the bushel, is 1000 bushels per acre.—*Farmer and Gardener.*

The improvement of Agriculture refines the taste of the purchasers of its products, and increase the knowledge of its patrons.

COMMUNICATIONS.

HARD-PAN LANDS.

Mr. L. Tucker—Always entertaining the strongest penchant for the country and agricultural operations, as the noblest and most important of man's worldly employments, I had last year arranged so as to give some personal attention to rural affairs. I at once saw, that the greatest objection to a successful cultivation, more especially of root crops, was the surface water that remains after the melting of snow in the spring, and falling of every rain in the summer, thus preventing their growth during the slow evaporation; and again, as soon as this process has ceased, by the indurated contraction, leaving it a matter of doubt, which is the greater evil of the two, the excessive moisture, or hard dry compactness of the land, that almost instantly follows. The moisture is easily got rid of, when there are ravines and sufficient slopes to them, by ploughing in a straight line to the water courses; but when the land lies, as vast bodies do in this vicinity, almost totally flat, the surface water, except when a hay crop is on the ground, becomes a very serious evil. Ditching has been recommended, but this, in order to be effectual, must be carried through in parallel lines every *twenty* feet distance, dug at least two feet deep and three feet wide at top, which is an expense that no farmer can afford here in our day and generation. Since, then, the cultivation of roots is found to be so much more profitable in the support of stock, than that of grass, corn and the smaller grains, and absolutely necessary to every one disposed to keep up with the improvements and profits of the age, it will be asked, what is to be done? I answer, *very deep* ploughing, aided by coarse straw, and as much long manure as it is possible to make or obtain; but to effect this, I cannot say that I should adopt the plough model of Sir E. Stracey, inserted in No. 12 of the Genesee Farmer, to effect the purpose; though I will frankly acknowledge, that I do not at present understand its details at all, and should be glad to see a complete description of all its parts and appliances, from the London Farmer's Magazine, in order to better judge of its capability and the thoroughness of its work.

But from the partial experiments that I have made, I think a plough formed in the usual manner, and which should go at least eighteen inches deep, and turn the furrow two feet wide, would in the long run be much more effectual. My own plan would be this. I can cut any quantity of coarse marsh hay, from the lowlands and islands in front of me, on the Niagara river. I should, therefore, in the month of August, when the grass was rankest, commence ploughing, and as fast as the furrows were turned, follow with loaded carts of this grass, and fill them up; every furrow then would be made an underdrain, more effectual than the spade could form. The lands should be laid up by turning a double furrow in the center, and then continuing each side to as great a width as was thought best, always ending them in some low place, or water course, if possible; and as the plough turned 1½ feet deep by 2 feet in width, between each land would ensue a fine open ditch, 4 feet by 2½, to which would inevitably filtrate from the center of each land (even supposing them originally a perfect level) the superabundant water, and then flow down these open furrows by giving them a slight descent to rivulets below, or any means of discharge, and thus pass off. The width of the open furrows would be ample for this purpose, and if necessary at any time to sink them a little deeper, it could easily be done with the spade, or putting the plough into them again. then taking a road scraper, the work would be formed with great rapidity.

This field, then, would be subject to the action of the frost all winter, and be finely pulverized by spring. The long manure would follow, and be spread upon it and ploughed in by an ordinary sized plough. harrowed well, and thus made to produce a fair crop the first year; and I would venture to say very great ones the five succeeding without a particle more manure. I last year made only a partial experiment of the kind, not being able to obtain a plough that would go in above 10 inches; and though the land lay perfectly flat, and without any side or cross drain, still the surface was dry, when in other lands close along side, that had not gone through the same process, the standing water that was left by every rain to a slow evaporation, was a source of great detriment to the crop.

Many no doubt will object to this course by saying,

1st. We have not a sufficiently strong team, to plough so deep in a hard-pan soil. I answer, then club with your neighbors to effect the purpose. It may take four to six yoke of cattle to do the first breaking up, but taking so wide furrows, you are actually getting along about as fast as in the usual shallow course.

2d. We have no meadow hay like you to use for this purpose. Then take straw, and if you have not enough of that, plough in a crop of rank clover or buckwheat.

3d. Land ploughed up from this depth, would be barren for years, unless manured more heavily by four fold than we could hope to do it. Now this I deny in toto. Look at the analysis of the subsoil, detailed in the same number of the Genesee Farmer alluded to above, in that very capital article headed "Management of Hard-Pans," and which I will venture to say, is a very fair analysis of the great majority of hard-pans throughout Western New-York. I have seen land as similar to this, as the eye, taste and smell could judge, dug up from a depth of six feet or more, and after being subject to the action of the frost, bear a very tolerable crop, without a particle of manure, though it is barely possible it might have had a trifle more vegetable matter than the above.

It seems to me, that such ploughing and manuring must be of inestimable advantage to all hard-pans, and if the process be found, after full experiment, completely effectual, these lands would become more valuable than any other class, as they will retain all that is put into them, and return it again with large interest to the giver; and the very water that is now so dreaded, sink as readily almost, as if falling on sand, mainly continuing held below at a proper depth, as a grand reservoir for a clear sun to call forth, as its assistance was needed to the growing crop. If any gentleman has had experience upon this subject, for one I should be happy to hear it in full. As a further corroboration of my opinion for deep, versus shallow ploughing, and ordinary ditch drains, and no drains at all, I will state that two ditches are now being dug for me; the one is on a part of the farm that has been cropped so long without manure, that the original vegetable matter is nearly exhausted; the hard-pan now approaching near the surface. The other is through a rich mass of vegetable decomposition of forest leaves, twigs and roots of trees, coarse grass and weeds, that have annually grown up, and fallen, and decomposed, from time immemorial. The first will not drain the water standing six feet from it, if resting in a hollow three inches below the top of the ditch, thus rendering it almost entirely useless, while the other has effectually drained the whole land at the distance of ten rods or more each side of it, and finely dried and made susceptible of cultivation of any crop, what before was full of standing pools, even at midsummer, and soft mud up to one's knees.

The rational of the superior efficacy of one ditch over the other, must be so obvious as to require no illustration. The deep ploughing proposed, together with the coarse hay and manure, would form a surface quite like the one through which the latter ditch spoken of penetrates; the open furrows left, being drains quite as effectual, especially if there were the slightest descent to them, as if thrown out by the spade. Another great advantage of so deep a plough; one, with a few systematic passings of it through his land, could throw the fields into rounding knolls and wavy banks, with ravines winding along between for carrying off the waste waters, thus changing a monotonous flat to a rolling and more picturesque surface, and one at the same time partaking somewhat more of the utilitarian.

The cost of this plough would hardly be an eighth of Sir E. Stracey's, and its weight not more than double that of the ordinary kind, and I should think that castings in the usual way, adding thickness in proportion to the required size, would be all that was requisite. Will any one engaged in the manufacture of ploughs and castings, favor us with his opinion upon the subject?

I particularly solicit public attention to the best model, and am prepared for one, with a good strong team, the moment I am furnished, to make a more thorough experiment than I have as yet been able to, and on a pretty extended scale.

A. B. Allen.

Buffalo, April 2, 1838.

Remarks on the Study of Meteorology.

☞ [The following was written in substance about a year since, shortly after the appearance of the article referred to in it, but not being in readiness, the sending of it was deferred at that time. I have, therefore, now sent it' that if it is thought worthy of a place in the columns of the Farmer, it may be inserted.]

Mr. Tucker—Having observed, with much satisfaction, the remarks of W. G. on the great snow of October 5th, 1836, in the December number of the first vol. of the Monthly Farmer, I have resolved to send you some of my thoughts on this subject, with which those remarks are closely connected, and which has for some time occupied a considerable portion of my attention. Meteorology is a branch of knowledge which certainly deserves the attention of those scientific men, who aim at the improvement of agriculture, and accordingly several learned men have made it their study. The ancients also cultivated this science, but very differently from the moderns. For being unacquainted with the instruments which modern meteorologiststs make use of, they were no doubt led, in this science, to study the natural phenomena, such as winds, clouds, and their various changes and appearances, almost exclusively. Modern meteorologists, on the contrary, being furnished with instruments, have devoted so much of their attention to observing and comparing their indications, that they have (with a few exceptions) almost omitted the study of the natural phenomena; in proof of which we need but examine the meteorological tables, of which there are so many kept at the present time. They consist, generally, of tabular statements of the indications of the thermometer and barometer, (some of them of the former only,) observed from one to six times in a day; some insert a column showing the course of the prevailing wind; some but once in a day, others two columns for the A. M. and P. M., either which however must be quite defective, the wind sometimes changing its course so much and so often in a day, nothing being said with regard to its strength, variableness or times of changing. Some insert also a column in their tables, mentioning whether the days are clear or cloudy, but giving no further information with respect to the nature, motions or appearances of the clouds, or when they appear and disappear,—things perhaps as important to be mentioned as the bare fact of their existence. Some tables also show the depth of rain, &c. which falls in inches and parts; but even this part of these registers is defective, for the time and circumstances are seldom or never mentioned, though perhaps of equal importance with knowing its exact quantity.

Now what is found to be the result of these two different methods. The ancients, as appears by their writings, acquired a knowledge of the method of predicting atmospherical changes with considerable accuracy, and this knowledge "subsists to this day, to a certain extent, among those whom necessity, arising from the nature of their occupations, renders diligent in comparing the present appearances of the atmosphere, and circumstances depending on its present state, with the changes which succeed. The aphorisms of Virgil, in his Georgics, are beautiful examples of this kind of skill, and possess philosophical, in an equal degree with poetical, merit." This knowledge which the ancients acquired, is the more remarkable, as it does not appear that they kept any written registers of the weather, but dedueed their knowledge merely from occasional observations. On the contrary, "since the invention of philosophical instruments, an at-

tention to these has so much superseded the ancient, and singly considered, the more rational way, of deducing prognostics," that this useful science has been neglected; and "it has accordingly been left to the ploughman, the mariner and the fisherman," and seems now, as to its legitimate and original end, that of predicting atmospherical changes, to be almost forgotten as a science.

Let it not be supposed, however, that I wish to insinuate that the ancient philosophy, generally, is better than the modern. I have quite a different opinion; but think, nevertheless, that the simple and natural method which the ancients followed, in this instance, tended much more to produce a useful result, than the course which modern philosophers have taken. Neither do I wish to undervalue meteorological instruments, for I have no doubt, that, if properly applied, they would aid in the improvement of meteorology; and if the experience of the ancients was successful without, ours may undoubtedly be made more so with the aid of instruments. It is only to their having been improperly introduced, to the exclusion of the more important sources of knowledge of the laws of this part of nature's operations, that I object, and therefore would propose to unite the observing of instruments and of the natural phenomena together, and then we may be enabled to attain to a greater degree of perfection in this science, than has been done by either of these methods separately.

For this purpose, an accurate daily account of all the atmospherical phenomena which occur, should be kept, describing the kind of clouds, whether they continue all day, when they appear and disappear, which way they move, and all such other particulars respecting them as may be thought worthy of notice; also, giving an account of all rain, snow, hail, thunder and lightning, thundergusts, storms, &c. To these should be added a register of the indications of the barometer, thermometer and hygrometer, and of the strength and course of the wind, and its times of changing either of these, which may be known by means of a wind-gage or anemometer, and all these instruments should be observed as frequently as possible, and should likewise be furnished, if possible, with a self-registering apparatus, by which the highest and lowest points to which they have attained in the intervals of observation, may be known. The depth of the rain, and of the melted snow and hail, which falls, should be measured with a rain-gage, and the increase of the depth should be noted at short intervals during the continuance of a shower, or fall of hail or snow, and the time of such observations noted also. Mists, fogs, frosts and dews, should also be taken notice of, and the electricity of the atmosphere frequently observed with an electrometer. Parhelia or mock-suns, and solar and lunar circles and coronas should be particularly noticed and described, as they have in all probability, a close connection with the state or altitude of atmospherical vapors.

Thus far for the manner in which I think a meteorological register *should* be kept, but as the observing of instruments is so inferior in importance to observing the natural phenomena, and as the latter can be done by any, I would propose to every person who is so disposed, and whose time admits of it, especially residents in the country and farmers, (as it is principally for their benefit it is intended, and because they have the best opportunities of making such observations,) to keep a meteorological register embracing as many of the particulars mentioned above as they can find convenient. Those who now keep meteorological tables of the barometer and thermometer, will find but little difficulty in adding the other particulars, and they will, no doubt, greatly increase the usefulness of their registers in doing so.

The result of such a method being generally practiced would be the collection of a mass of useful facts in meteorology, from all parts of the country, which in the hands of scientific men, would tend to throw great light on those, hitherto, obscure operations of nature, which are the cause of the variable phenomena of the atmosphere, for in this case the meteorologist would have not only the "landmarks in the science," but with the entire outlines, and being furnished with an immense variety of cases, he would be enabled to discover the various circumstances in which different atmospherical changes succeed each other, and hence the method of predicting those changes would be known, and "the general principles which govern mutations of the weather and seasons be discovered.

It seems very probable, however, that meteorologists would discover many rules for the weather before the science should be brought to much perfection, and thus the merits of their labors, would be, in some measure, appreciated almost from the first; indeed it seems likely that the greatest usefulness would be attained before all, or perhaps before much the greater part, of the fundamental laws, which govern this part of nature's operations are discovered; but whether this prove to be the case or not, the subject certainly deserves a portion of the attention of men of science engaged in the promotion of agriculture. B. S.

Montgomery Co., Pa., Feb. 28, 1838.

The Scours in Horses.

Mr. L. Tucker—Having been a subscriber for your Monthly Farmer since its commencement, and been gratified with the perusal of its pages, I wish you success in your efforts to promote the farming interest of our country. Being more used to the practice of farming than the theory, or the use of the pen, I will only inform you of one experiment, and ask a few questions. Last fall there were several cases of scours in horses in our place. One of my horses was attacked with it, and had become very weak before it came to my knowledge. I put him on dry hay, and gave him a small mess of carrot tops, cut fine with a knife, and mixed with ground oats and salt, to make it palatable. I was induced to try the above, from the astringent taste of the carrot tops. I gave two messes and saw no more of the scours; but as it was the only case I had, I cannot say the carrot tops cured him, but think it was.

There was something said in a former number of the farmer, of the artichoke. From the remarks, I thought it different from what we call by that name. We have a root we call artichoke, which I intend to try some experiments with. It is a great producer, and cattle, sheep and hogs, are very fond of them. The only objection to them is, that they cannot be eradicated when once admitted into the soil. The only use they have been recommended for is pickles. They remain in the ground where they grow, all winter, without being injured by frost.

I tried my hand at roots last season, and had a complete failure by planting when the ground was too wet, followed soon by a severe drouth; but I intend to try again. My carrots did the best. David Swick.

Ovid, Feb. 26, 1838.

HOOF-AIL.

Mr. Tucker—Having seen in your February No. of the Monthly Farmer, a notice soliciting information in relation to a disease that has made its appearance among cattle, called the Hoof-Ail, or Foul in the Foot,—a disease that I had an opportunity some years since to become acquainted with, and saw many experiments tried, and at last found what, I think, is the cause. We succeeded in curing nearly all that we operated upon, and all that had not gone so far as to have their hoofs crack off, or separate the hoof from the live flesh.

The disease originates from a small pipe that lies under the small hoofs or dew-claws, that can be cut out as easily as the pipe to a ring-bone on a horse, and with equal safety. There should be some care in cutting, not to cut across the cords, but make the incision up and down, and the upper end as far up as the small hoofs, and with a small hook raise the pipe, and cut carefully down on each side till you can get the most or all of it out. Put in the wound some rosin and oil as warm as you can without burning, and keep the foot dry.

N. B. The pipe is, if not too much affected, white, and resembles a cord or nerve, and is about the size of a goose-quill, and in all two or three inches in length. It can be known from a cord by hooking into it and raising it up, you will find it not tight but easy to move. Those that have cattle affected with this disease will do well to make the search the first opportunity, and they will readily discover the cause and how they should proceed in the operation. A Subscriber.

Cheshire, March 28, 1838.

Niagara Co. Agricultural Society.

The following Address was delivered before this Society, at its formation, on the 27th of February last, by William Parsons, Esq.:

(*Continued from page* 119.)

On the subject of ploughing, I would say but little. The too common mode of ploughing grass land, for example, is to tear it into pieces in a rough and careless manner, leave the sods loose on the surface, and then by harrowing to break them fine, and if possible to bring all the grass and vegetable matter to the surface, to be exhaled by the sun and air. A more wasteful and slovenly process cannot be pursued. An intelligent and practical farmer of Mass. had the curiosity to weigh the vegetable matter of a single foot of sod land, taken from a field which had been mown for a number of years, thinly set with timothy and red-top, and found it to contain nine oz. of vegetable matter clear of earth, consisting of roots and tops of the grass; giving at this rate, twelve and a quarter tons to the acre. This of itself, if covered in the soil would be a very considerable manuring. But it left upon the surface it would be entirely lost. It is therefore esteemed of the greatest importance in ploughing, to turn the sod as completely over as it can be turned, (lapping a little upon the last furrow) and at a season when there is the greatest quantity of vegetable matter on the surface. To roll it down smoothly that the air may be excluded, and all the benefit arising from the decomposition of the vegetable matter retained in the soil, and afterward to cultivate the crop as far as possible without disturbing the sod. Few operations of husbandry are performed in general in a more slovenly way than ploughing. The half finished manner in which the sod is turned—the frequent baulks—the rough and ragged ends of the fields—and the utter disregard to all straight lines, show the importance of more special attention to this most important branch of tillage. How frequently do we see the ploughman walking by the *side* of his plough, managing it with one hand only. The opinion is too prevalent that ploughing may be done by any body, ar every body. But this is a great mistake. A *good* ploughmen is rarely to be found. But it is to be hoped as our farmers bestow more attention to this subject, procure *better* ploughs and keep them in *better order*, these habits will be corrected, neatness, care and regularity will be introduced, which are as useful in the enlargement of the crop, as they are agreeable in the appearance.

Another subject to which I would beg the attention of my brother farmers, is that of consuming the products of the farm, *upon* the farm, especially that of hay, straw, roots, &c. The sale of hay from a farm is subject to serious abatements. For every ton of hay sold from the farm if the owner would preserve its fertility he should return one cord of manure.—Tbis is estimated to be worth two dollars. Then it will cost from one to two dollars per ton to convey the hay to market. Deduct these from the price of the hay, which will in our market probably average about ten dollars, and we have left only six or seven dollars per ton, abating drawbacks. The present year only three or four dollars will remain. Will not every observing farmer agree with me, that this is a kind of husbandry, operating greatly to the farmer's injury? or in other words—this hay can be used in the rearing of stock, much more to the farmer's interest.

But let us take another view of the subject. Suppose we compare the value of hay with other crops in the feeding of stock. An unworked horse will consume 4¼ tons of hay per year, and if he is worked, he will require 100 bushels of oats in addition. Or say for the winter season of feeding, one half this quantity—two and one eighth tons of hay, and fifty bushels of oats. This will require at the average of one and a half tons of hay and thirty bushels of oats. This will require at the average of one and a half tons of hay and thirty bushels of oats per acre, about 3 acres of land to keep one working horse one half the year. Now suppose we change the feed; and instead of hay and oats, we give him carrots and cut straw. One acre of carrots will produce on an average yield, say 15 tons. (Double this quantity has been raised.) It is believed that one half this quantity, 7½ tons, with cut straw, will keep the horse in better condition than the hay and oats, the same length of time. Shall we then use three acres of land, or only half of one acre in the keeping of one horse. These facts are the results of repeated and accurate experiment, and it is believed by the best practical farmers, that in feeding cattle and sheep,

the saving of land will be about the same ratio. I am aware that it will be replied: "If such statements be true, we have no occasion to raise hay at all." And so it would appear. And I am fully of the opinion, were we to adopt the practice of raising roots for feeding our stock, instead of hay, that three fourths of the land from which we cut our hay, might be used in the cultivation of wheat. Suppose we make an estimate. Twelve and even fifteen hundred bushels of ruta baga turneps have been raised on one acre of land. But we will call 600 bushels an average crop. This, at one bushel per day, will keep four cows from the 1st of December to the 1st of May. This with chopped straw, chaff, &c. will keep the cows in good condition, and they will give more milk, make much more butter, than if fed on dry hay. The four cows, if kept on hay alone, will consume at least eight tons, which will require on an average yield about six acres of land. There must then be a very great saving by this change of culture and feed. And this saving is much the more valuable with us in this county, which probably is not surpassed by any county in the state for the culture of wheat, because we would thus be enabled greatly to increase the quantity of this Prince of vegetables; the bread fruit of our climate, and staple of our productions.

Another subject specially worthy of remark at this time, is that which has called us together. An effort is to be made this 27th day of February, 1838, to form an agricultural Society in the county of Niagara, and shall we succeed? To succeed in the *formation* of a Society merely, is a small matter. But shall it be efficiently sustained? As we say, so it shall be. There are some, at least, entirely opposed to every effort of this kind, others perfectly stupid and senseless; while others, standing entirely back—jealous—will peep through the cracks, and whatever is to be gained, seize it as by stealth. But such should never be the conduct of a *farmer*, and if he be an intelligent, high-minded philanthropist, such never will be.

But it may be honestly inquired by some, is there any use or advantage in such organizations? We answer, yes. 1st. from the very nature of things. That an organized body can do more, and bring about results sooner, than that of individuals, is a position not to be controverted. Else why do men associate for the promotion of the objects of philanthropy and benevolence. Why are associations formed for the distribution of the Bible? Why have we missionary—colonization, and other societies? Why or by what means is the world moved as in a body on the subject of temperance, but by the operations of state, county and town societies? Organized associations act as a grand lever upon public opinion, which must be moved before any great public object can be accomplished. Why not then, if so much power is to be gained, and so great advantage is to be derived from it, establish and encourage societies for the improvement of agriculture? None will deny the importance of such improvements, or that there is no danger of harm or evil from such organizations. Let us then form a Society for the promotion of agriculture in the county of Niagara. Let us hold out inducements to excite a spirit of inquiry, and of emulation, in all the various branches of husbandry. Let us associate and interchange sentiments, and let each profit by the experience of the rest; and soon the face of the country will be changed—soon shall we have occasion to enlarge our barns and granaries—soon will our barren fields become fertile, our productive valleys double their increase, and this whole county—late a wilderness—"will bud and blossom as the rose."

Nor will its effects be less visible on our moral and intellectual state. The first and best employment of man will soon be regarded as honorable and pleasant, as it has been wont to be considered menial and slavish. Mind will act upon mind, and it will soon be regarded as an object of high ambition to excel in the acquisition of science, and the production of successful results. And he will be honored who shall produce the greatest results with the least expense.

Again: that an Agricultural Society should be formed, we argue from the manifest beneficial effects of their organization in other counties and in other states. Of this fact there can be no dispute. In a great proportion of the counties of this state, in New England and elsewhere, are such societies formed, and in some of them are working wonders for the community. I will give you an example.

In the legislature of Massachusetts, in a debate on the bill to renew an act for the encouragement of agriculture, Mr. Allen makes the following statement: "It has already been suggested that the soil of the county from which I came is not the most favorable for agricultural pursuits. The expense of cultivation there is thought by some to exceed the amount to be derived from it. This was the prevalent opinion before the introduction of modern improvements. The operations of an *Agricultural Society* have proved that labor and skill can make even despised soils productive. I suppose that 10 bushels of rye to the acre, 50 of Indian corn, 2 tons of English hay, and 200 bushels of potatoes, were formerly considered as average crops. Since premiums have been offered, we have claims for from 40 to 50 bushels of rye, from 115 to 122 of Indian Corn, from three to four tons of English hay, and from 400 to 500 bushels of potatoes; and our improvements have not been confined to single acres—in several instances the products of entire farms have been increased more than four fold."

It is the universal sentiment with men acquainted with the effects of such organizations, that at least a similar result is always to be observed, where they are efficiently sustained. Indeed, so palpable has been the improvement in some parts of the State, that farmers it is said, who manifested formerly the strongest prejudice, and were the most hostile, have recently come forward, and frankly acknowledged that the improvements in every department of husbandry had been very great, and they were willing to impute the benefits in a great measure to the influence of agricultural societies. It is said even, that it is no difficult thing for an observing stranger in passing through the country, to designate the counties where agricultural societies have existed for a few years; from the improved condition of farms, buildings, stock, &c. in their general appearance. An intelligent inhabitant of Berkshire county, Mass., stated to Judge Buel, that the influence of the Agricultural Society of his Co. had increased their products at least 30 per cent., and enhanced the value of their lands in no less ratio. The Society in that county has been efficiently sustained more than 20 years. But it is said, and we have the most unquestionable testimony of the fact; that in Europe, where Societies have existed for fifty years, the advantages and improvements are in no less proportion; that in Scotland since the formation of their Societies, the products have increased *ten* fold, on account of the improved system of husbandry. Why then shall not we follow in the course which is marked with such great results. Why be reluctant in the promotion of the best temporal interests of Society. It is for our own benefit—it is for the benefit of all classes of Society that we thus do. Shall we not then go forward, stem the tide of popular prejudices and indifference, and show to the community, by well conducted and efficient efforts, that agricultural Societies have a benign and salutary influence, in facilitating the labors and increasing the profits of husbandry, not only; but in improving the moral and intellectual condition of the people.

But the inquiry naturally arises here, of whom shall our Society be composed? Of farmers only? Yes. If farmers are the only class to be benefitted. And thus we should think was the opinion of some our professional men, by their remarks at our preliminary meetings. I was not a little surprised to learn from the chairman of the meeting (for I did not hear it myself) that it was stated in substance by some gentleman of the Bar, "that they felt a great delicacy in saying any thing on the subject of husbandry, as they were not farmers, and felt no particular interest in such a subject." But is it not the fact that professional men, merchants, mechanics, and indeed every other class have a very deep interest in the success of the farming interest? Let such reflect what would be the condition and success of their own business on the failure or prostration of husbandry? Is not the prosperity of every class, trade and profession, more or less dependant on that of the farmer? The farmers are really and directly the only producing class, all others the consumers; and did the husbandmen fail to raise a surplus produce, for the consumption of the other classes, it is to be feared that, to some extent at least, they would be found consuming one another.

The truth is, the high prosperity and success of agriculture, in furnishing a large surplus produce, proves individually of more pecuniary value to the other professions, than to the agriculturist. Do you ask, how so? I will tell you. Look at the 450 names of farmers on the merchant's ledger; and has *he* no interest whether these farmers raise a surplus or not? Look at the price of produce, almost every article necessary for family consumption now, and for a year or two past, while our bread stuffs to the amount of several millions of bushels are *im*ported from Europe; and the price of these articles when we *ex*ported a like, or greater quantity. Has the mechanic no interest in the success of agriculture? If not, why does he seek customers who make prompt and regular payments? Why not dispose of their work and wares with the same readiness and cheerfulness to the indolent and slothful, as to the enterprising and prosperous? But no; the former has no surplus produce. I can think of no trade, profession, calling or business, the success of which is not more or less directly dependent on the prosperity of the husbandman, save one. The man whose business is made up of fraud, and extortion—who is ever on the watch to take advantage of a man's misfortune—who without conscience, grinds the face of the poor: this man's fortune is not enlarged by the success of agricultural enterprise; but this man stands alone.

Let us go forward then, heart and hand, put our shoulders to the wheel, and crowd forward that which tends to so great results. Let all—let every man among us, join the Agricultural Society of Niagara County, and aid in the triumphant success of the objects thereof.

Connected with the operations of this Society, and which is over esteemed of great utility and importance is that of an agricultural show and fair.

Among the advantages which may be enumerated as arising from these, from such an assemblage as we should endeavor to make our annual fall meeting, are the following: An Address, which is contemplated by our Constitution, confined to science of practical agriculture, and embodying as it should, many valuable hints and much useful information. An annual assemblage of farmers upon an occasion exclusively devoted to subjects connected with agricultural improvements, where each other's views—the result of useful experiments, and the experience of all, will be brought where each one individually can profit by it. And here I may be permitted to suggest, what will probably be readily conceded, that any number of professional men brought together to converse upon what appertains to their profession, of equal qualifications, and equal knowledge and experience, cannot fail to derive advantage from a mutual interchange of each other's knowledge and qualifications. The intelligent mechanic will concede that any two of his occupation, cannot hold communication with each other upon subjects connected therewith, without an interchange of suggestions useful to both. And thus with the farmer. I may well waive any argument to show that associated experience, a comparison of the practical views of the many will not be to him decidedly advantageous. Our fairs—our annual assemblages, will be common ground where those who attend and participate, will have come there to inform and to be informed; to add what is in his power, as an equivalent for what he takes from the common stock of practical knowledge. It should, and unquestionably will, be a condition attached to the awardiag of premiums, that those who compete for them shall give to the Society a detail of the process he has used, the mode of cultivation, the soil, and all that appertains to the department of agriculture in which he has excelled—or if a competitor be a breeder of stock, the practical information having reference to his experiment and results. All this will not only form topics for conversations, but will be spread abroad through the medium of the public press. It will emphatically be a farmers' holiday, an occasion of practical instruction and amusement. It will bring us together, and make us better acquainted with each other—be productive of a fellow-feeling, that will beget unity of action, stimulate us to demand, and by our endeavors deserve for our calling, that rank and elevation so justly its due. Is there a farmer in Niagara, who would not cheerfully pay the small pittance attached to membership, for the practical advantage, the instruction and amusement, he will derive from our agricultural fairs, if they are what they may be? I have too much confidence in the intelligence, the increasing desire for agricultural improvements in our favored country, to doubt for a moment, that we shall all step forward, and with zeal and determination, consummate the desirable objects of mutual association.

(*Conclusion next week.*)

Working Cows.

We have no doubt, that many farmers who do not want cattle for traveling much on the road, will find an advantage in working cows. As this custom is not common among us, it would be at once opposed by many as inconsistent and unreasonable. In this respect it would be like many other improvements. There was a time when many farmers thought the only method to dispose of a large quantity of apples, was to work hard in the fall and fill up their cellars with cider, and then work hard in the winter to drink it up. They would have laughed at the thought of wintering hogs in a thriving condition, or fattening them mostly on apples; but experience has taught them that apples are valuable for making pork, and that cider drinking is attended with trouble and expense, and is injurious to health; and had we time, we would show that many other improvements when first introduced were regarded as changes for the worse.

Why cannot cows work as well as mares that are with foal, or have to nourish their offspring? Mares, without injury to themselves or their young, perform considerable labor until within a month or two of their time of foaling; and they again labor in a few weeks after that time; and with kind and gentle treatment, and good keeping, they and their colts are better than they would be if they were entirely idle. Look at animals throughout the wide creation and see how few among them are idle mothers. Exercise is conducive to health and strength; and every animal, four legged or two legged, ought to take, at least, moderate exercise; it is conducive to their comfort.

Much more might be said on this subject by way of reasoning, but experience is the best and most convincing argument, and here it is. An intelligent and excellent farmer observes, that he found oxen to be the most unprofitable stock he kept, as it cost a great deal to keep them

through the winter, and he had but little for them to do at that season; and he concluded to work cows, as recommended in the Yankee Farmer a few years since; and from a few years' experience, he finds it one of the greatest improvements, by way of economy, that he ever made.

In 1836 he commenced, in the spring, working a pair of cows that had calved the January previous; they were four years old, of a large size. He did all his ploughing and other spring work with them—working them almost every day. They gave a good mess of milk during the spring, and it did not appear that their labor caused any shrinkage, excepting on two days when a colt that was under the process of breaking was worked before them, and caused them unusual fatigue.

In the summer he hauled his hay with them, and found them to answer every way as well as oxen. In the winter of 1837, in which the snow was very deep, he used his cows for breaking roads, and they frequently got into the snow so that it was necessary to shovel them out, yet they were not injured and were as good as oxen for this purpose. That year they calved in April.

Last fall he worked another yoke of cows, making a team of four, with which he ploughed, breaking green sward 13 or 14 days, besides ploughing old ground. He did all his fall work with this team—hauling rocks and wood, harvesting, &c. He has worked them this winter, hauling heavy loads of wood.

About two-thirds of their food is straw and turneps, the rest hay. He says that cows are quicker and smarter than oxen, and will do as much labor according to their size, when kept in good condition, and are not so hard to break as steers, as all except one were perfectly kind after the third day. He has kept his cows very well and treated them very kindly, and every one must know that in working cows, this is of the greatest importance.—Every animal should be treated with kindness, but harsh treatment of oxen would not be attended with so much injury as it would with cows. One of these cows is partly, and if we recollect right, mostly of the Durham short horned breed; she is an excellent worker and a good milch cow. Another farmer informs us that he know of two cows being worked regularly as oxen, and worked hard too, from the time that they were calves till they were 6 or 7 years old, and they were of a large size and very handsome: he understood that they gave a good mess of milk when well kept.—*Yankee Farmer.*

DAHLIAS.

These splendid flowers have had two formidable obstacles to contend with in New England. In the first place, many have thought our summers—especially, so far north as Vermont—entirely too short for them; and secondly, improper soil and culture have been recommended.

In regard to the first, it is sufficient to say that we had ourselves, last year, plants which furnished a profusion of flowers for more than two months before the frost injured them. Some started quite late in a slight hot bed, began to bloom about the 20th of July. Others planted out in the open ground, about the first of June, furnishing flowers early in August. Some of the plants had nearly done flowering, and had ripened seed, before the frost injured them. A little pains will secure dahlias in this climate from the first of August till the hard frosts—which in common seasons, is a good deal longer than most of us have roses.

As to soil and cultivation, we have been led astray partly from English authorities, and partly from ignorant writers at home. We have been directed to put Dahlias in a dry and not very rich soil. In the drizzly climate of England, it may be necessary to avoid too wet a soil. But with us, gardens do not often furnish a spot to be avoided on that account. And as to their flowering best on a poor soil, there is no truth in it.

Different varieties require, for their perfection, somewhat different treatment; but as general directions, the following will answer:—

Select a deep, rich soil; manure it liberally with a fat compost—say a mixture of virgin mould, leached ashes, and well rotted stable manure—and make it mellow to the depth of fifteen inches. You will have flowers earlier, to start them in pots or in a hot bed, to be transplanted when the soil becomes warm, and their is no danger of frost. If not started before, put out the roots from the 20th of May to the 1st of June—mixing with the earth around them more manure. They should stand from three to four feet apart. They are "deep drinkers." and must have, from some source, plenty of moisture through the season. The last very wet and cool season furnished a remarkable bloom of Dahlias throughout the country. The best application is—*soap suds:* which should be given abundantly and often.—Keep the soil clean and light around them.

As they grow, it will be necessary to tie them to strong stakes, as they are easily broken down by the wind.

Let only one stalk grow from a tuber, and trim off the lower branches, and all superfluous wood, from that one. When the bloom commences, if the plant shows a profusion of buds, they should be trimmed out.

'But the roots of the finer kinds are expensive.' Very true. Widnell sells his choice new varieties at $40 or $50 a tuber. Splendid ones may be obtained of our florists, however, at from fifty cents to two dollars. And, if you do not like that expense, you may get a paper of choice seed for nine-pence. If sown even as late as the first of June, you will probably get some flowers the first year. A variety of new kinds may thus be obtained in two or three seasons, at a very trifling expense. Out of about a dozen plants from the seed in 1836, we had two remarkably fine ones, and several others that would have been thought superb a few years ago.

In the fall, when the leaves become blackened by frost, they should be cut down, and three or four inches of soil thrown over the stumps. As soon as there is danger that the frost will reach that depth, they must be taken up. They may be deposited, for the winter, in a cellar, in dry sand, where the frost will not touch them; or buried in a trench dug in dry soil. In this case, put plenty of earth between the layers of roots, and cover the whole with leaves or horse manure and earth, sufficient to keep out the frost. The latter method we have not tried; but, it is said that roots, thus wintered, will be more vigorous.—*Vermont Chronicle.*

Cider cake is very good, to be baked in small loaves. One pound and a half of flour, half a pound of sugar, a quarter of a pound of butter, half a pint of cider, one teaspoonful of pearlash; spice to your taste. Bake till it turns easily in the pans, I should think about half an hour.

Be punctual to all engagements at the time appointed, and never make a contract unless you intend to fulfil it.

Great Arrivals
AT THE ROCHESTER SEED STORE.

WE have received by some of the first boats, *a number of* TONS *in weight* of English and American Field and Garden Seeds, Tools, Books, &c. Our assortment for the season is now full and complete, and we would inform our distant customers and agents, that their orders which have been already received, will be immediately attended to, and the articles put up and forwarded with all possible despatch.

The demand for seeds by wholesale during the winter was so great, that our fall stock of many kinds had become entirely exhausted; but the quantities now received are so great, and the varieties so numerous, that our friends need have no scruples about sending us extensive orders. We are so confident that these seeds will prove genuine, and give the best of satisfaction, that we feel a great degree of pleasure in offering them to the public. And we most cordially invite all who feel an interest in the advancement of Agriculture and Horticulture, to call and examine for themselves.

☞ Catalogues sent gratis to all applicants.

REYNOLDS & BATEHAM,
Nos. 3 and 5 Arcade Hall, Rochester, N. Y.
April 21, 1838.

New Onion Seed.

YELLOW Dutch, Large Strasburg, White Portugal and Large Red Onion Seed, the growth of 1837, just received direct from England.

The crop of Onion Seed was almost a total failure in this country last season, and being unable to obtain a supply of NEW SEED in the United States, we last fall sent an order to England for a supply from that country. It has arrived in fine order, and we are confident will prove a superior article.

REYNOLDS & BATEHAM.
Rochester, April 21, 1838.

Root Cultivation.

A LARGE supply of new and genuine Ruta Baga, Mangel Wurtzel, Sugar Beet and Orange Carrot Seed, just received at the Rochester Seed Store.

REYNOLDS & BATEHAM.
Rochester, April 21, 1838

Seed Store Agencies.

LARGE and complete assortments of Seeds, put up at the Rochester Seed Store, may be found at the following places:

Cleveland, John Williams,
Buffalo, W. & G. Bryant,
Lockport, G. W. Merchant,
Batavia, J. V. D. Verplanck,
Le Roy, M. P. Lampson & Co.
Geneseo, J. F. Wyman,
Mount Morris, R. Sleeper,
Canandaigua, W. M. Chipman,
Geneva, J. & J. N. Bogart,
Palmyra, Hoyt & May,
Oswego, Holden & Vincent.

Of the character of these seeds we deem it unnecessary to say any thing further, than that we believe they will fully sustain the high reputation which this establishment has already acquired, and secure a continuance of the liberal patronage it has hitherto received.

☞ Persons wishing larger quantities or different kinds than can be found at the above places, may leave their orders with the Agents, and the seeds will be sent to them.

REYNOLDS & BATEHAM.
Rochester Seed Store, March 31, 1838.

Tea Spring Wheat.

A FEW bushels genuine Tea Wheat for sale by
REYNOLDS & BATEHAM.
Rochester, April 21, 1838.

Improved Durham or Short Horn Bulls.

THE subscriber has several yearling bulls of this very choice breed for sale, from direct imported stock; also, one half Devon and Durham do. A. B. ALLEN.
Buffalo, April 3d, 1838. ap 14-6w

Improved China, Berkshire and Tuscarora Pigs.

THE subscriber expects in the months of May and June, several litters of the above superior animals. The price of the Chinas, at 6 weeks old, per pair, will be $10,00
Berkshires and Tuscaroras, " " " 12,00
and for every month added to the above age of pigs, $1,25 will be charged on the price of the former, and $1,50 on the latter. These hogs are universally admired wherever known, and are considered the choicest and best breeds of England and America, returning the farmer a greater amount of pork for their feed than any others, and therefore the most profitable stock that can be kept.

The Improved Chinas are celebrated for the sweetness and delicacy of their meat, are easily kept fat in pasture without other food, being perfectly quiet and not wandering at all; are very handsomely spotted, a clear black and white, the colors about equal; have small short heads, ears and legs, with deep and broad bodies, and weigh from 300 to 400 lbs. according to keep at eighteen months old. There is nothing equal to these boars for crossing with other hogs, as they reduce their long coarse heads and legs, and give breadth and depth to their carcase quicker than any other kind. They have no affinity to what is commonly called the Grass breed of hogs, being of a distinct race, and entirely superior every way.

The Berkshires are highly prized for their lean, tender and juicy hams, are darker spotted than the above, and will weigh at the same age from 4 to 600 lbs.

The Tuscaroras are a cross of the China with the Berkshire and other superior breeds, have nearly the quietness and aptitude to fatten with the China, are of the same color, and weigh equal to the Berkshires. A. B. ALLEN.
Buffalo, April 3d, 1838. ap 14-6w

Extensive Sale of Imported Stock,

At the Old Norton Farm, East Bloomfield, five miles west of Canandaigua, Ontario Co., New York.

NUMEROUS applications having been made to purchase this stock, the proprietor has concluded, that in order to afford a fair opportunity to those who have already made enquiries and others desirous of obtaining the breed to offer the same at

PUBLIC AUCTION,
On Wednesday the 2d of May next,

on which day will be sold twenty *Improved Durham Short Horns*, Bulls, Cows and Heifers of various ages. Amongst the former is the famous Bull "ROVER," which was bred by the Earl of Carlisle, got by Rockingham, dam, (Cherry) by Wonderful, gr. dam by Alfred, &c. &c. Rockingham was by Fairfax, dam (Maria) by Young Albion; gr. dam, (Lady Sarah) by Pilot; gr gr. dam by Agamemnon. Also, ALEXANDER, ORION, SPLENDOR and others. And of the Cows and Heifers, BEAUTY, PRIMROSE, own sister to Reformer, PRIZE, LADY BOWEN, BRILLIANT, &c. &c.

Three full blooded Mares and one 3 year old Stud colt, of pure racing breed, viz:—Brown Mare FALCONET, by Falcon, dam by Catton, (Hindcliff's dam) Hannah by Sorceror Amelia, &c.

Bay mare Miss ANDREWS, sister to Caroline, by Catton, dam by Dick Andrews; her dam by Sir Peter; Play or Pay's dam by Herod, &c.

Chestnut Mare JESSICA, by Velocipede, dam by Sancho; gr. dam Blacklock, and Theodore's dam.

Bay stud colt, HUMPHREY CLINKER, by Allen's Humphrey Clinker, dam Miss Andrews, &c.

The well known stud horses TURK and ALFRED, whose stock for the two seasons they have stood is unsurpassed.

Likewise about 20 Rams and a few Ewes of the improved New Leicester breed of Sheep. These are chiefly from a Ram belonging to the celebrated breeder Sir Tatton Sykes, for which he paid 300 guineas.

The whole of the above stock were selected from the highest order of blood in England by their present owner who imported it direct to this country, and can be recommended as worthy the notice and confidence of breeders.

Pedigrees may be had on, or previous to the day of sale, and further information obtained on application to

THOMAS WEDDLE.
East Bloomfield, 1st January, 1838.

N. B.—The terms of payment will be liberal to those who wish.

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.
apr 15-tf

N. B. CASH will be paid for a few thousand two years old APPLE TREES.

Items from Foreign Ag Journals,

Received at the office of the Genesee Farmer.

SOMETHING FOR NATURALISTS.—Sir,—A short time before last harvest I confined a beautiful dark speckled c ck with three or four speckled hens in a rather dark place, to prevent them from getting into some grain near ripening. I believe they were confined some five or six weeks. The cock's feathers are all turned to a beautiful white; instead of being a fine speckled cock, he is now a milk white one. In the hens' feathers there can be no alteration perceived. For the change in the color of the cock, I must leave the naturalist to account.—*Srews. Chron.*

TO PRESERVE NAILS FROM RUSTING.—"I beg to communicate a little valuable information to those who may use nails for fastening the wall trees. I use cast nails about an inch and a quarter long, and heat them pretty hot in a fire shovel over the fire, but not red, and then drop them into a glazed vessel containing train oil. They absorb a good deal of oil, and thus prepared never become rusty, and will last many years."—*Mag. of Domes. Econ.* [Would not the preparation of cut or wrought nails used in making board fences, or in any place where there is considerable exposure to the weather, in the manner recommended above be a decided improvement?—EDS. FARM.]

DEPTH OF THE LONDON CLAY.—It is well known that London is situated in an immense clay basin, and that to procure good water this clay must be perforated to the sand or gravel strata beneath. The depth of these wells determine the thickness of the clay at different points. "At Harrow wells 70 feet have been dug. Several in the city of London are between 200 and 300 feet deep, and in other situations the thickness of the clay is much greater. In digging a well at Wimbledon for Lord Spencer 530 feet was reached before the sand and gravel were touched. Near the Regent's Park the clay has been bored to the depth of 500 feet without success. One mile east of London the clay is only 77 feet thick; at a well in St. James street it is 225 feet, and at High Beach 700 feet thick."—*Dr. Hoggs, London.*

QUICK WORK.—In an obituary notice in the *Hereford Journal*, of Mr. James Williams, called the best butcher in England, it is stated, that "at twelve years old he slaughtered and dressed eight sheep in the hour; and upon one occasion, in order to 'cut up' the boasting of a Liverpool butcher, (who had done the feat in 20 minutes) James Williams, slaughtered and dressed a beast in 19½ minutes!" By his attention to business he had amassed a handsome property—$70,000.—*Farm. Mag.*

THE FIRST WAGON.—A writer in the London Mirror says, 'I recollect the first broad wheeled wagon that was used in Oxfordshire, and a wonderful crowd of spectators it attracted. I believe at that time there was not a post chaise in England except two wheeled ones. Lamps to carriages are also a modern improvement. A shepherd who was keeping sheep in the vicinity of Oxfordshire, came runing over to say, that a frightful monster with saucer eyes, and making a great blowing noise was coming towards the village. This monster turned out to be a post chaise with two lamps.'

RAPID DEVELOPMENT OF MATTER IN THE TURNEP.—"It is stated by Mr. Cambell in his Political Survey, that in 1758 a turnep was pulled at Tudenham in Norfolk which weighed 29 pounds, and this seems to be the largest on record in modern times.* It has been found that an ounce of turnep seed contains from fourteen to fifteen thousand single seeds; or in other words that a seed weighs upwards of the fourteen-thousandth part of an ounce. By comparing this with the weight it sometimes acquires in growing, it will be found that supposing the rate of increase to be equal, it may gain fifteen times its own weight in a minute. By actual experiment made on moss or peat ground, turneps have been found to increase by growth 15,990 times the weight of their seeds each day they stood upon it. From these statements we may be enabled to form some estimate of the amazing power which the Creator has put into the hand of man, by subjecting the vegetable world to his skill in the arts of cultivation."—*Duncan's Sacred Philosophy.*

PLANTING AND WASHING TREES.—"In the year 1827, I planted a small strip to make an experiment with the under mentioned kind of forest trees;—elms, ash, plane, sycamore, chestnut, walnut, poplar, laburnum, Scotch fir, larch, and lilac. When planted two years, moss made its appearance on all but the laburnum. I washed them in the month of October, putting lime into soft water, making it of the consistency of white wash for rooms, and putting it on with a white washer's brush. In the spring of the following year, I found the bark free from moss, and the trees quite healthy. I have continued washing them every second year since that time. When planted they ran from three to five feet in length; there are many of them now 20 feet in heigth and two feet in circumference a foot from the ground. Eight years ago I planted two fruit trees in my garden by way of experiment. In the second year I found them getting mossy the same as the forest trees; since which time I have washed one of them every October in the same manner; to the other I have done nothing. When planted they were both exactly four feet high, and three inches in circumference, the height of the one that has not been washed for these six years is now six feet four, and the circumference; seven inches and three fourths. The height of the one that has been washed is ten feet five inches, and the circumference ten inches and one fourth, which in my opinion is a certain proof of the utility of washing with lime water. A woman can do a hundred of them of that size in a day, the wages being ten pence and the cost of the lime four pence. George Pringle."—*Mark Lane Express.*

LIQUID MANURE FOR FLOWERS.—Florticulturists cannot be aware of the advantages of applying manure in a liquid state, or it would more frequently be used. I have found that all free flowering plants, are improved by its applications; and indeed I have not found any flowering plant whatever that has not been benefitted by a greater or less quantity of this element. By using liquid manure, the necessity of turning plants out of a pot and replacing the exhausted earth with fresh soil, is mostly obviated. In watering plants with liquid manure, it will be observed, that the soil, after having been watered a few times, does not dry as soon as when watered with clear water, and this independent of the extra nutritious properties left in the soil by the application of manure water. Watering with clear water must be regarded in a great measure as so much labor misapplied; when by using manure water, the necessity of frequent watering is obviated, a change of earth rendered unnecessary, and a more rapid growth obtained."—*Floricult. Mag.*

DESTROYING CATERPILLARS ON SHRUBBERY, &C.—Take some live peat or coal, place it in a flower pot or other convenient vessel, and add to the coal a small portion of Tobacco, and placing it under the bush to be smoked. An old table cloth or carpet is thrown over the bush, or plant, and bellows used for blowing the fire. In this way the tobacco smoke that moves upwards is confined to the bush, and the caterpillars in the course of four or five minutes, fall to the ground apparently lifeless. As they soon recover, however, it is necessary to collect them together with a hoe, and destroy them. The smoke should be applied on the first appearance of the insects, as their ravages are thereby effectually checked, and in their younger stages the tobacco smoke operates more speedily."—*Agr. Observer.*

MAGNIFICENT STRAWBERRY.—On the 25th of July was plucked in the garden of Mr. Wilson, Ruswarp, near Whitby, a very large strawberry of Wilmot's superb variety, measuring seven inches in circumference, and weighing one ounce and a half.—*Farm. Mag.*

* "A flat turnep was raised in Barnstable county this season (1837) which after the tops were cut off, weighed *thirty-nine pounds.*"—*New Eng. Farmer, for January 24, 1838.*

Superior Garden & Agricultural Seeds.

THE subscriber has now on hand a full supply of Garden and Field Seeds, growth of 1837, among which are the finest Cabbages, Cauliflowers, Broccoli, Radishes, Peas, &c. that are cultivated in England, France, and Holland, together with every sort that can be raised to advantage in our own country, and which are grown expressly for my use from stock furnished and raised by the most experienced gardeners in this country; in short, every article emanating from my store, warranted genuine and fresh.

Also, Skinless Oats, Potatoe Oats, 44 lb. weight to the bushel, Perennial Rye Grass, White Clover, Lucerne or French Clover, Orchard Grass, Herd's Grass, White Mulberry, and Yellow Locust Seeds, Spring Tares or Vetches, genuine Mangel Wurtzel, and Ruta Baga and Field Turnep Seeds, also Italian Spring Wheat, well worth the attention of Farmers.

Wholesale Dealers supplied on accommodating terms. Price lists, by the pound and bushel, furnished on application, as also catalogues of my whole collection, gratis.

Flower Roots, Bulb Glasses, Green-house Plants, the best Books on Gardening, &c. at various prices, Bird seed of every sort, Pearl Barley, Oatmeal, Embdon Grots for Gruel, Split Peas, White and Brown Mustard Seed, Garden Flower Pots and Garden Tools, Russian Bass Mats.

The Flower Seed department embraces the choicest variety to be found in this country, in which are included choice double Dahlia Seed, Carnation and choice Pinks, German and China Asters, splendid Double Balsoms, with an addition of several new varieties, accompanied with a printed direction for culture and management.

Orders will be punctually attended to and carefully packed and forwarded as directed, but as the collection of distant debts are often troublesome, and sometimes impracticable, it is desired that satisfactory reference be made to persons in Albany, when the order is not accompanied with the money.

☞ Also, SEED CORN.—The subscriber has a quantity of the celebrated 12 rowed Dutton Corn; the advantages of raising this corn are its prolific qualities.

W. THORBURN, Seedsman,
Sign of the Plough, 317 N. Market st. opposite Post Office.
Albany March 17, 1838. mar24

THE HIGH-BRED TROTTING HORSE

BELLPORT!

BELLPORT will stand the present season, commencing 1st of May and ending 1st of August, at Clarence Hollow and Batavia. Terms, $15 to insure, payable 1st of January next.

DESCRIPTION.

Bellport was foaled at Long Island, June, 1831, will consequently be seven years old the coming summer, is of a beautiful bright blood bay, with a small star in the forehead, one white foot, and black legs, mane and tail—is within a fraction of sixteen and a half hands high, (65 1 2 inches,) of proportionate girth and length, a well set head, elegant arched neck, full powerful chest, of beautiful smooth symetry of limbs, and yet of great bone and muscle, weighing twelve hundred and forty-seven pounds.

OF HIS PEDIGREE.

It need only be said, that he was got by the Imported Horse Bellfounder, out of Lady Alport, he by the celebrated trotter Old Bellfounder, dam Velocity, by Haphazard, by Sir Peter, out of Miss Henry, by the famous Eclipse, and thus up to the Darley Arabian, the great progenitor of England's stoutest and most beautiful racing stock. Lady Alport was got by Membrina, he by Imported Messenger, dam by Tippoo Saib, &c. &c. For further particulars of which horses see Stud Book.

It will be seen by the above, that Bellport unites the *best* of England's *racing and trotting blood*. Bellfounder at five years old trotted 2 miles in less than 6 minutes, and the following year was matched for 200 guineas to trot 9 miles within 30 minutes, which he won easily. His owner shortly after challenged to perform with him 17 1-2 miles within one hour, which was not accepted. Velocity trotted on the Norwich road in 1806, sixteen miles in one hour; in 1808, trotted twenty eight miles in one hour forty-seven seconds, and has done many other great performances against time. With the exception of Flying Childers, from the same progenitor, Eclipse was undoubtedly the fastest horse ever known. Having *distanced* all competitors, he at last walked over the Newmarket course for the King's plate, and finding nothing hardy enough thereafter to match him, was never again started. Haphazard, Sir Peter, Membrina, Tippoo Saib and Messenger, were among the best horses of their day, and as good stock as England ever produced.

Bellport was bred by T. T. Kissam, Esq. of New-York, and was selected after much care and attention to the subject, for his uniting good blood and limbs to fine action and great substance, qualities so rarely found in the light race horse of the present day. He has stood two seasons in this vicinity, his stock shows fine size and form, and will undoubtedly prove very superior, either for the saddle or harness, and particularly adapted for the heavy roads of Western New-York. His spirited breeder in a letter accompanying him out here, thus speaks of the blood:—"Bellport is from a stock held in high estimation, both in England and in this country. There are several horses here sired by Bellfounder that can trot a mile within 2 minutes and 45 seconds, and could not be bought for $500; one of them could not be had for $1500; it is supposed that he can trot a mile in 2 minutes 35 seconds. This young horse I have never had trained, nor even much practiced; he has a very fine step, and I have not a doubt but he will be able to trot a mile within 3 minutes."

The Farmer will therefore see, that he may reasonably calculate on the best of stock from this source, and it is a matter of no trifling importance to him, whether he shall turn off a colt at from $200 to $500, that has cost no more to be raised than one that will hardly bring from $50 to $80.

Bellfounder is a full brother to Bellport, one year older, marked as above, his color simply a shade or two darker, and is half a hand less in height. He is a horse of admirable finish, and with a partial trial under the saddle the year he was 5 years old, easily trotted over the Harlem Course (a few feet short of a mile) in 2 minutes 45 seconds, and it is the opinion of his trainer, that notwithstanding the difficulty of curbing so high spirited a horse to a trot, that upon a second and more thorough trial, he could be given as fast a foot as ever graced the trotting course of America. He will probably stand the ensuing season on the Niagara River road, two miles below Black Rock.

Either of the above horses will be sold, or exchanged for other stock at a fair price, or hired to a responsible person for any part of the country.

For further particulars refer to L. F. ALLEN or A. B. ALLEN of Buffalo. HENRY GORDON.
March 10, 1838.

Monroe Horticultural Garden & Nur-

SERIES, GREECE, MONROE CO., N. Y.

THIS establishment now comprises over 20 acres, covered compactly with Trees and Plants in the different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, splendid Pæonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired delivered on the canal one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant gratis, or may be had by calling at the office of the Genesee Farmer.

April 1, 1837. ASA ROWE.